10/576769

## MP12 Rec'd PCT/PTO 2 1 APR 2006

**PATENT** 

DK-US065052

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Takeshi HIKAWA et al.

Serial No.: New - (National Phase of

PCT/JP2004/015680)

International filing date: October 22, 2004

For: METHOD FOR ESTIMATING

DC MOTOR COIL TEMPERATURE, DC MOTOR CONTROL METHOD

AND THEIR DEVICES

## INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner of Patents Washington, DC 20231

Sir:

In accordance with MPEP 609 and 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicants bring the references listed on the attached PTO-1449-Form to the Examiner's attention and request that they be considered and made of record in this application. Copies of the non-U.S. patents are attached.

Japanese Patent Publication No. 1-248927 appears to disclose a vehicle steering system with a motor controller that detects a malfunction of a motor irrespective of the amplitude of a current by discriminating the malfunction according to the value of a DC imaginary resistance obtained on the basis of the duty ratio of a current, an applied voltage and a PWM signal to a DC motor. An English abstract is provided to better understand this reference. The international search report indicates that this reference is relevant to claims 1-28 of the international application and cites page 2, lower left column, line 12 to lower right column, line 3 as being relevant.

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National Phase of PCT/JP2004/015680 International filing date: October 22, 2004

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Prompt examination on the merits is respectfully requested.

Respectfully submitted,

Patrick A. Hilsmier Reg. No. 46,034

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Dated: April 21, 2006

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				Group Art Unit	
(use as many sheets as necessary)			necessary)	Examiner Name	
Sheet	1	of	1	Attorney Docket Number	DK-US065052

		Document Number	Publication Date	Name of Patentee or Applicant of	Pages Columns Lines Where Relevan	
Examiner Initials *	Cite No.1	Number - Kind Code <sup>2</sup> (if known)	MM-DD-YYYY	Cited Document	Pages, Columns, Lines, Where Relevan Passages or Relevant Figures Appear	
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FOREIGN PATENT DOCUMENTS						
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		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				Т <sup>6</sup>
		JP-1-248927 A	10-04-1989	Nakajima		No
		JP-2002-22813 A	01-23-2002	Fujii et al.		Yes
		JP-2002-367307 A	12-20-2002	Takeda et al.		Yes
		JP-2003-009589 A	01-10-2003	Kagimura et al.		Yes
		EP 1 312 932	05-21-2003	Fujii et al.		N/A
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Examiner Signature	Date Considered	

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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at <u>www.uspto.gov</u> or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is